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A Working Testing Process

Abstract

Argus is an automated security system deployed at 4 DOE and DoD facilities across the United States. Argus is composed of 3 major subsystems including over 20 software and firmware products.

This paper describes the processes performed for testing the Argus Security System. The primary focus is on the independent testing activities. A brief description of unit, integration, and system testing performed by the development staff will be presented.

Independent system testing is conducted by the Quality Assurance team using a separate test system. The independent testing process is a practical approach to implementing independent testing for an existing software-based system undergoing major enhancement development. The primary focus of testing is based upon system level regression testing, major feature enhancements and new product testing. Test planning is conducted prior to each testing activity. This planning is based upon risks associated with the degree of modifications and their impact on the customer operational systems. The testing process tracks anomalies detected during testing. From these anomalies, metrics are collected. The testing process is completed by the generation of a test report summarizing the testing activities.

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